Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

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Letter to the Editor

Role of the Urologist During a Pandemic: Early Experience in Practicing on the Front Lines in Brooklyn, New York

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In December 2019, a highly infectious novel coronavirus (SARS-CoV-2) was identified in Wuhan, China [1] and on March 26, 2020, the USA became the world's most afflicted nation [2,3]. New York city has become the epicenter of the pandemic, with 52,948 confirmed coronavirus disease 2019 (COVID-19) cases, while Brooklyn has become the second most afflicted borough, with 14,420 cases as of April 3, 2020 [4].

The SUNY Downstate Urology Residency Program has active house staff in four hospitals within Brooklyn, including University Hospital of Brooklyn (UHB), which was designated a COVID-only center on March 28, 2020. Given our unique perspective in practicing on the front lines of this pandemic, here we describe our early experiences as urologists in the face of this unprecedented public health crisis.

We serve four hospitals in Brooklyn, including one state-run, one city-run, one private, and one federal-run Veterans Affairs (VA) hospital. Similar to UHB, the VA New York Harbor-Brooklyn was designated a COVID-only center for veterans throughout the city. The urology practice in each hospital has responded to the pandemic differently on the basis of governmental and institutional guidance and patient care needs. However, two general implementations were observed across all institutions: a reduction in surgical volume via cancellation of elective cases and a decrease in outpatient services via utilization of telemedicine.

When elective surgery is halted, hospital resources and labor can be reallocated for management of COVID-19 patients. A significant proportion of COVID-19 infections are believed to occur in health care settings so proceeding with elective surgery puts a patient at risk of multiple exposures [5]. Nosocomial exposure could occur intraoperatively, during inpatient recovery, or on unanticipated readmission. Furthermore, before becoming symptomatic, infected patients have the potential to seed the virus throughout the community [6]. Telemedicine consultations are effective in promoting social distancing and thus allow a significant proportion of patients to remain home.

Before the COVID-19 pandemic, our department engaged in weekly grand rounds and routinely participated in regional and national conferences and courses. However, in accordance with social distancing practices, in-person academic gatherings have been cancelled. We are managing this challenge by maintaining our weekly didactic program using group video conferencing software. The American Urological Association is also releasing virtual educational content online in lieu of its annual meeting. Regarding clinical education, although there is no substitute for direct patient contact, maintaining access to the robotic simulation system and surgical skills laboratory ensures that we continue to develop technically.

Regarding credentialing, we received correspondence from the American Board of Urology (ABU) on March 30, 2020, stating that they are planning to reschedule Part 1 of the ABU qualifying examination. With respect to trainees applying for additional fellowship training, most national programs have switched to a virtual interview format to reduce the risk of exposure and unnecessary travel.

While the surge in COVID-19 patients has resulted in a strain on almost all facets of the health care system, the reduction in surgical volume on the urology service has enabled us to participate in direct care of these patients. So far, we have been called on to help bolster critical care, emergency medicine, COVID-19 screening, and internal medicine services. Ultimately, we are doctors first and urologists second; it is our responsibility to alleviate suffering within the community. This pandemic has created a unique circumstance in which fulfilling this noble cause requires us to temporarily shift disciplines.

It is unavoidable that while tackling this pandemic face on, we are putting both our own health and that of our loved ones at risk. Before our first COVID-19 assignments, we held

https://doi.org/10.1016/j.eururo.2020.04.024

a virtual departmental meeting for each of us to discuss personal concerns. We decided collectively that any resident at high risk of severe disease or with a spouse at high risk would be excluded from front-line coverage. In addition, we decided to dedicate 30 min of our weekly grand rounds to COVID-19 discussion, ongoing redeployment issues, and assessment of resident wellbeing, with two additional weekly check-ins held via video chat. We felt it imperative to openly discuss concerns and questions with departmental leadership, ensuring that expectations were set for all involved. For the house staff in particular, knowing the roles and responsibilities that attending leadership would undertake to offset the burden on resident trainees was important for morale and demonstrated a unified approach.

Uncertainty remains regarding the short- and long-term effects of this pandemic on our patients and ourselves. A significant proportion of our practice involves the management of malignant disease, and with reallocation of resources to treatment of COVID-19 we are having to make difficult decisions regarding appropriate work-up, treatment, and surveillance of cancers. How long can a hematuria work-up be delayed? How long can we delay treatment of muscle-invasive bladder cancer or other high-risk cases before the risk of metastasis outweighs the risk of hospitalization during this time? How long can we delay routine oncologic surveillance imaging and endoscopy? These are some of the many questions we, as a specialty, need to address. Furthermore, it remains unclear if the COVID-19 pandemic will lead to new genitourinary disease states, either directly or indirectly via the behavioral responses of patients (eg, an increase in nephrolithiasis secondary to hypersupplementation with vitamin C).

As other departments globally begin to grapple with the same challenges we face today in New York, we encourage all to stay united in support of each other. For those of us with the privilege of good health, we must search for the courage to step up and assist patients suffering from this disease. As our urologic colleagues in Tan Tock Seng Hospital in Singapore eloquently stated, "COVID-19, infectious diseases, and emergency medicine are far removed from a urologist's specialized skill set, but we should always remember the Hippocratic oath we swore and the importance of empathy and servitude: 'May I always act so as to preserve the finest traditions of my calling and may I long experience the joy of healing those who seek my help'" [7].

Conflicts of interest: Jeffrey P. Weiss is a consultant for Ferring Pharmasciences and an advisory board member for the Institute for Bladder and Prostate Research. The remaining members of the SUNY Downstate College of Medicine Urology Team have nothing to disclose.

Acknowledgement: On April 10th, 2020, Alex Bass, a physician assistant in the Department of Urology at Coney Island Hospital in Brooklyn, New York passed away from complications related to COVID-19. Alex was the heart and soul of the service. He practiced with the utmost professionalism and compassion for all his patients. Alex was a role model, teacher, and friend for those of us who had the privilege of working with him throughout our residency. We would like to dedicate this letter to his memory.

Appendix A. Supplementary data

Supplementary material related to this article can be found, in the online version, at doi:https://doi.org/10.1016/j.eururo.2020.04.024.

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